## WHAT IS CLAIMED IS:

1. A plant of the genus *Raphanus*, whereby the plant, upon growth of its germinated seed in a medium that comprises water, at a temperature of 10-35°C under high humidity and under a daily cycle of light, produces a sprout that comprises anthocyanins at a level of at least 100 nmol per gram fresh weight of sprout, whereby the majority of said anthocyanins have an anthocyanidin moiety that has the structure of Formula 1,

HO 
$$\frac{8}{0}$$
  $\frac{1}{4}$   $\frac{1}{3}$   $\frac{1}{4}$   $\frac$ 

wherein R<sub>1</sub> is OH or OCH<sub>3</sub> and wherein R<sub>2</sub> is H, OH, or OCH<sub>3</sub>.

- 2. The plant of claim 1, wherein the anthocyanins have an absorbance maximum in the range of 515-550 nm.
- 3. A plant according to claim 1, wherein the plant is of the species Raphanus sativa.
- 4. A plant according to claim 3, wherein the plant is obtained through breeding and selection from the *Raphanus sativa* lines CGN 6924, CGN 7240, ATCC No. PTA-3630, or combinations thereof.
  - 5. A plant according to claim 1, wherein the plant is a sprout.

- 6. A plant according to claim 3, wherein the plant is a sprout prior to the two-leafed stage.
  - 7. A container containing a plurality of sprouts according to claim 5.
- 8. A plant according to claim 1, wherein the plant is a plantlet that has at least two leaves and a height of less than 20 cm.
  - 9. A plant according to claim 1, wherein the plant is a plantlet that has two leaves.
  - 10. A container containing a plurality of plantlets as defined in claims 8 or 9.
- 11. A container according to claim 10, wherein the container contains at least 3 plantlets per cm<sup>2</sup>.
- 12. Material from a plant according to claim 1, wherein the material is a root, a stem, a stalk, a leaf, a petal, a siliqua, a seed, a turnip, pollen, meristem, callus, a sepal, a flower, a cell, tissue or a combination thereof.
- 13. A method for producing a sprout as defined in claim 5, wherein the method comprises:
  - (a) germinating seed of a *Raphanus* plant, in a medium comprising water and at a temperature of 10-35° C, under high humidity, optionally in a container, wherein the *Raphanus* plant is as defined in any one of claims 1, 2, 3 or 4;
  - (b) growing the germinated seeds obtained in (a) on a non-nutritive solid support soaked in a medium comprising water, at a temperature of 10-35°C, under high humidity and under a daily cycle of light, until a sprout of a desired developmental stage is obtained.

- 14. A method for according to claim 13, wherein the seeds are germinated in (a) in a rotating drum or container while spraying the seed with water at least once, and optionally with the addition of light, and wherein the germinated seeds obtained in (a) are grown under the conditions defined in (b) for at least 48 hours.
- 15. A method according to claim 13, wherein in (a) the seeds are germinated on the non-nutritive solid support at a density of 3-12 seeds per cm<sup>2</sup>, and wherein in (b) the germinated seeds obtained in (a) are grown into plantlets having at least two leaves; and wherein an optional step (c) further growth of the plantlets is arrested by cooling to a temperature between 1 and 6°C.
- 16. A method for producing anthocyanin, wherein the method comprises the steps of:
  - (a) growing a Raphanus plant as defined in any one of claims 1, 2, 3, or 4;
  - (b) harvesting the Raphanus plant or a part thereof;
  - (c) recovery of the anthocyanins in the plant or part thereof; and
  - (d) optionally, purifying the anthocyanins.
- 17. A plant of the genus *Raphanus*, whereby the plant upon germination produces a sprout that comprises anthocyanins at a level of at least 100 nmol per gram fresh weight of sprout, and whereby the plant is of the species *Raphanus sativa* and is obtained through breeding and selection from the *Raphanus sativa* lines CGN 6924, CGN 7240, ATCC No. PTA-3630 or combinations thereof, whereby the majority of said anthocyanins have an anthocyanidin moiety that has the structure of Formula 1,

HO 
$$\frac{8}{5}$$
 OH OH OH OH

wherein  $R_1$  is OH or OCH3 and wherein  $R_2$  is H, OH, or OCH3.